AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) A thermal management system for a battery including a plurality of cells, comprising:

at least one duct defining a single flow path and contacting an outer wall of each of said cells in a serial manner adapted to allow a liquid medium to flow therethrough.

2. (original) A thermal management system according to claim 1, wherein said liquid medium is thermally conductive.

3. (original) A thermal management system according to claim 1, wherein said at least one duct is made from a thermally conductive material.

4. (original) A thermal management system according to claim 1, further comprising a thermally conductive medium positioned between said at least one duct and said cells where said duct contacts said cells.

5. (original) A thermal management system according to claim 1, wherein said duct has an inlet manifold to allow said liquid to flow into said duct, and an exit manifold to allow said liquid to flow out of said duct.

6. (original) A thermal management system according to claim 1, further comprising a heating and cooling apparatus to heat or cool said liquid.

7. (original) A thermal management system according to claim 1, further comprising a pump which causes said liquid to flow through said duct.

8. (original) A thermal management system according to claim 7, wherein said pump includes a heating and cooling apparatus to heat or cool said liquid.

9. (original) A thermal management system according to claim 1, wherein said at least one duct has a rectangular cross-section.

10. (original) A thermal management system according to claim 1, wherein said at least one duct is at least partially wrapped around each of said cells.

11. (previously presented) A thermal management system for a battery including a plurality of cells, comprising:

at least one thermal jacket for receiving a liquid thermal medium;

wherein said at least one thermal jacket defines a single flow path, and is located between and contacts adjacent one of said cells in a serial manner.

12. (original) A thermal management system according to claim 11, wherein said liquid medium is thermally conductive.

13. (original) A thermal management system according to claim 11, wherein said at least one thermal jacket is made from a thermally conductive material.

14. (original) A thermal management system according to claim 11, further comprising a thermally conductive medium positioned between said at least one thermal jacket and said cells where said thermal jacket contacts said cells.

15. (original) A thermal management system according to claim 11, wherein said at least one thermal jacket has an inlet manifold to allow said liquid to flow into said thermal jacket, and an exit manifold to allow said liquid to flow out of said thermal jacket.

16. (original) A thermal management system according to claim 11, further comprising a heating and cooling apparatus to heat or cool said liquid.

17. (original) A thermal management system according to claim 11, further comprising a pump which causes said liquid to flow through said at least one thermal jacket.

18. (original) A thermal management system according to claim 17, wherein said pump includes a heating and cooling apparatus to heat or cool said liquid.

19. (original) A thermal management system according to claim 11, wherein said at least one thermal jacket has a plurality of cell receiving portions shaped to fit at least some of an outer surface of said cells.

20. (original) A thermal management system according to claim 11, wherein said at least one thermal jacket has a rectangular cross-section.

21. (original) A thermal management system according to claim 11, wherein said at least one thermal jacket is at least partially wrapped around each of said cells.

22. (currently amended) A thermal management system for a battery including a plurality of cells, comprising:

a plurality of thermal jackets for receiving a liquid thermal medium;

wherein each of said plurality of thermal jackets is located between adjacent ones of said cells; and

a thermally conductive medium positioned between at least one of said plurality of thermal jackets and said cells where said at least one of said plurality of thermal jackets contacts said cells.

23. (original) A thermal management system according to claim 22, wherein said liquid medium is thermally conductive.

24. (original) A thermal management system according to claim 22, wherein at least one of said plurality of thermal jackets is made from a thermally conductive material.

25. (canceled)

26. (original) A thermal management system according to claim 22, wherein at least one of said plurality of thermal jackets has an inlet manifold to allow said liquid to flow into said at least one of said plurality of thermal jackets, and an exit manifold to allow said liquid to flow out of said at least one of said plurality of thermal jackets.

27. (previously presented) A thermal management system for a battery including a plurality of cells, comprising:

a plurality of thermal jackets for receiving a liquid thermal medium;

wherein each of said plurality of thermal jackets is located between adjacent ones of said cells, and

a heating and cooling apparatus to heat or cool said liquid.

28. (original) A thermal management system according to claim 22, further comprising a pump which causes said liquid to flow through said at least one thermal jacket.

29. (original) A thermal management system according to claim 28, wherein said pump includes a heating and cooling apparatus to heat or cool said liquid.

30. (original) A thermal management system according to claim 22, wherein at least one of said plurality of said thermal jackets has a plurality of cell receiving portions shaped to fit at least some of an outer surface of said cells.

31. (currently amended) A thermal management system for a battery including a plurality of cells, comprising:

a plurality of thermal jackets for receiving a liquid thermal medium;

wherein each of said plurality of thermal jackets defines a single flow path, and is located between adjacent ones of said cells, and

wherein at least one of said plurality of thermal jackets has a rectangular cross-section.

32. (previously presented) A thermal management system for a battery including a plurality of cells, comprising:

a plurality of thermal jackets for receiving a liquid thermal medium;

wherein each of said plurality of thermal jackets is located between adjacent ones of said cells, and

wherein at least one of said plurality of thermal jackets has a changing cross-section throughout the length of said at least one thermal jacket.

33. (original) A thermal management system according to claim 22, wherein each of said plurality of thermal jackets has an inlet manifold to allow said liquid to flow into each of said plurality of thermal jackets, and an exit manifold to allow said liquid to flow out of each of said plurality of thermal jackets.

34. (previously presented) A thermal management system for a battery including a plurality of cells, comprising:

a plurality of thermal jackets for receiving a liquid thermal medium;

wherein each of said plurality of thermal jackets is located between adjacent ones of said cells, and

a heating and cooling apparatus to which each of said plurality of said thermal jackets is connected.

35. (original) A thermal management system according to claim 34, wherein each of said plurality of said thermal jackets is connected to the same heating and cooling apparatus to heat or cool said liquid.

36. (original) A thermal management system according to claim 35, wherein each of said plurality of said thermal jackets is connected in parallel to said heating and cooling apparatus.

37. (original) A thermal management system according to claim 35, wherein each of said plurality of said thermal jackets is connected in series to said heating and cooling apparatus.

38. (original) A thermal management system according to claim 22, further comprising at least one pump, wherein each of said plurality of thermal jackets is connected to said at least one pump which causes said liquid to flow through said thermal jackets.

39. (original) A thermal management system according to claim 38, wherein each of said plurality of thermal jackets is connected to the same pump which causes said liquid to flow through each of said thermal jackets.

40. (original) A thermal management system according to claim 39, wherein each of said plurality of said thermal jackets is connected in parallel to said pump.

41. (original) A thermal management system according to claim 39, wherein each of said plurality of said thermal jackets is connected in series to said pump.

42. (original) A thermal management system according to claim 38, wherein said pump includes a heating and cooling apparatus to heat or cool said liquid.

43. (original) A thermal management system according to claim 39, wherein said pump includes a heating and cooling apparatus to heat or cool said liquid.

44. (original) A thermal management system according to claim 22, wherein each of said plurality of said thermal jackets has a plurality of cell receiving portions shaped to fit at least some of an outer surface of said cells.

45. (original) A thermal management system according to claim 22, wherein each of said plurality of thermal jackets has a rectangular cross-section.

46. (previously presented) A thermal management system for a battery including a plurality of cells, comprising:

a plurality of thermal jackets for receiving a liquid thermal medium;

wherein each of said plurality of thermal jackets is located between adjacent ones of said cells, and

wherein each of said plurality of thermal jackets has a changing cross-section throughout the length of said thermal jackets.

47. (previously presented) A method of thermally managing the temperature of a battery including a plurality of cells by thermally managing the temperature of said cells, comprising:

passing at least one hollow tube, defining a single flow path, among at least some of said cells so as to make contact with said at least some of said cells in a serial manner; and

passing a liquid medium through said at least one hollow tube.

48. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 47, wherein said liquid medium is thermally conductive.

49. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 47, wherein said at least one hollow tube is made from a thermally conductive material.

50. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 47, further comprising placing a thermally conductive

medium between said at least one hollow tube and said cells where said at least one hollow tube contacts said cells.

51. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 47, wherein said at least one hollow tube has an inlet manifold to allow said liquid to flow into said at least one hollow tube, and an exit manifold to allow said liquid to flow out of said at least one hollow tube.

52. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 47, further comprising heating said liquid in a heating apparatus connected to said at least one hollow tube.

53. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 52, wherein said heating of said liquid is prior to said liquid passing through said at least one hollow tube.

54. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 47, further comprising cooling said liquid in a cooling apparatus connected to said at least one hollow tube.

55. (original) A method of thermally managing the temperature of a battery including a plurality of cells according to claim 54, wherein said cooling of said liquid is prior to said liquid passing through said at least one hollow tube.

56. (previously presented) The method of claim 47, further comprising looping said hollow tube around said cells more than once.

57. (previously presented) The method of claim 47, further comprising ribs disposed on an internal surface of said hollow tube.